CLAIMS

What is claimed is:

SV	7	1
1	1.	A method comprising:
2		extracting a first data from a display buffer, the first data generated by a
3		first application and being associated with a user interface from the
4		first application;
5		recognizing a layout from the first data; and
6		using the layout to create an overlay to display a second data generated by
7		a second application, wherein there is no direct link between the first
8		application and the second application.
1	2.	The method of claim 1, wherein recognizing the layout comprises
2		performing a pattern recognition operation on the first data to create the
3		layout.
1	3.	The method of claim 1, wherein using the layout to create the overlay
2		comprises:
3		determining an overlay location on the layout to place the second data
4		based on known information about the layout;
5		generating the overlay of the layout;
6		placing the second data in the overlay; and
7		merging the overlay with the layout.

1	4.	The method of claim 3, wherein the overlay location has a context
2		consistent with the second data.
1	_	The same the defection of such against the company to a property of the district of the distri

- The method of claim 4, wherein the context is provided by the first
 application, and wherein a user interacts with the second application
 using the context.
- 1 6. The method of claim 1, further comprising:
- writing the overlay in the display buffer such that the second data is
 displayed at the overlay location without changing sections of the first
 data outside of the overlay location;
- 5 displaying information in the display buffer; and
- interacting with the second application through the second data at the
 overlay location.
- 7. The method of claim 6, further comprising running the first application in
 the background while interacting with the second application.
- 1 8. The method of claim 1, wherein the first application runs independently from the second application.

Ricoh 21 074451.P115

Sul	7	1
1	7 _{9.}	A machine-readable medium providing instructions, which when executed
2		by a set of one or more processors, cause said set of processors to perform
3		the following:
4		extracting a first data from a display buffer, the first data generated by a
5		first application and being associated with a user interface from the
6		first application;
7		recognizing a layout from the first data; and
8		using the layout to create an overlay to display a second data generated by
9		a second application, wherein there is no direct link between the first
10		application and the second application.
1	10.	The machine-readable medium of claim 9, wherein recognizing the layout
2		comprises performing a pattern recognition operation on the first data to
3		create the layout.
1	11.	The machine-readable medium of claim 9, wherein using the layout to
2		create the overlay comprises:
3		determining an overlay location on the layout to place the second data
4		based on known information about the layout;
5		generating the overlay of the layout;
6		placing the second data in the overlay; and
7		merging the overlay with the layout.

Ricoh

1	12.	The machine-readable medium of claim 11, wherein the overlay location
2		has a context consistent with the second data.
1	13.	The machine-readable medium of claim 12, wherein the context is provided
2		by the first application, and wherein a user interacts with the second
3		application using the context.
1	14.	The machine-readable medium of claim 9, further comprising:
2		writing the overlay in the display buffer such that the second data is
3	,	displayed at the overlay location without changing sections of the first
4		data outside of the overlay location;
5		displaying information in the display buffer; and
6		interacting with the second application through the second data at the
7		overlay location.
1	15	The meaning was debte medium of claim 14 from a commission woming the
1	15.	The machine-readable medium of claim 14, further comprising running the
2		first application in the background while interacting with the second
3		application.
1	16.	The machine-readable medium of claim 9, wherein the first application
2		runs independently from the second application.
S	7	\
1	(17.	A computer system, comprising:
2		a bus;

23

074451.P115

3		a data storage device coupled to the bus; and
4 B	3	a processor coupled to the data storage device, the processor operable
5		to receive instructions which, when executed by the processor, cause
6		the processor to perform a method comprising:
7		extracting a first data from a display buffer, the first data generated by
8		a first application and being associated with a user interface from
9		the first application;
10		recognizing a layout from the first data; and
11		using the layout to create an overlay to display a second data
12		generated by a second application, wherein there is no direct link
13		between the first application and the second application.
1	18.	The system of claim 17, wherein recognizing the layout comprises
2		performing a pattern recognition operation on the first data to create the
3		layout.
1	19.	The system of claim 17, wherein using the layout to create the overlay
2	17.	comprises:
3		determining an overlay location on the layout to place the second data
4		based on known information about the layout;
5		generating the overlay of the layout;
6		placing the second data in the overlay; and
7		merging the overlay with the layout.

Ricoh 24 074451.P115

6

7

1 The system of claim 19, wherein the overlay location has a context 20. 2 consistent with the second data. The system of claim 20, wherein the context is provided by the first 1 2 application, and wherein a user interacts with the second application 3 using the context. 1 22. The system of claim 17, further comprising: 2 writing the overlay in the display buffer such that the second data is 3 displayed at the overlay location without changing sections of the first 4 data outside of the overlay location; 5 displaying information in the display buffer; and

1 23. The system of claim 22, further comprising running the first application in 2 the background while interacting with the second application.

overlay location.

interacting with the second application through the second data at the

1 24. The system of claim 17, wherein the first application runs independently from the second application.

Swi	4	•
1	(25.	A method, comprising:
2		modifying data in a display buffer that is generated by a first application
3		with data generated by a second application, the first application
4		running independently from the second application; and
5		receiving input in response to user interactions with the second application
6		through a user interface associated with the data generated by the first
7		application, wherein the data generated by the second application is
8		placed in a location in the user interface, wherein the location is
9		contextually consistent with the data generated by the second
10		application.
1 2	26.	The method of claim 25, wherein modifying data in the display buffer comprises:
3		performing a pattern recognition operation on the data generated by the
4		first application to create a layout; and
5		forming an overlay with the layout and with predetermined information
6		about a display corresponding to the user interface, the overlay used
7		to determine placement of the data generated by the second
8		application in the display.
1	27.	The method of claim 26, wherein the layout comprises of grid cells
2		corresponding to display areas in the user interface, and wherein the data
3		generated by the second application is placed in the grid cells

Ricoh 26 074451.P115

1

2

28. The method of claim 25, wherein the first application runs in the
 background while the user interacts with the second application.

B6/	,
1^{29} .	A machine-readable medium providing instructions, which when executed
2	by a set of one or more processors, cause said set of processors to perform
3	the following:
4	modifying data in a display buffer that is generated by a first application
5	with data generated by a second application, the first application
6	running independently from the second application; and
7	receiving input in response to user interactions with the second application
8	through a user interface associated with the data generated by the first
9	application, wherein the data generated by the second application is
10	placed in a location in the user interface, wherein the location is
11	contextually consistent with the data generated by the second
12	application.

- 30. The machine-readable medium of claim 29, wherein modifying data in the display buffer comprises:
- performing a pattern recognition operation on the data generated by the
 first application to create a layout; and
- forming an overlay with the layout and with predetermined information
 about a display corresponding to the user interface, the overlay used
 to determine placement of the data generated by the second
 application in the display.

Ricoh 27 074451.P115

1	31.	The machine-readable medium of claim 30, wherein the layout comprises
2		of grid cells corresponding to display areas in the user interface, and
3		wherein the data generated by the second application is placed in the grid
4		cells.
1	32.	The machine-readable medium of claim 29, wherein the first application
2		runs in the background while the user interacts with the second
3		application.
Sy	2 .7	
1	/33.	A computer system, comprising:
2		a bus;\
3		a data storage device coupled to the bus; and
4		a processor coupled to the data storage device, the processor operable
5		to receive instructions which, when executed by the processor, cause
6		the processor to perform a method comprising:
7		modifying data in a display buffer that is generated by a first
8		application with data generated by a second application, the first
9		application running independently from the second application;
10		and
11		receiving input in response to user interactions with the second
12		application through a user interface associated with the data
13		generated by the first application, wherein the data generated by
14		the second application is placed in a location in the user

Ricoh \ 28 \ 074451.P115

6

36 15 interface, wherein the location is contextually consistent with the data generated by the second application. 16 The computer system of claim 33, wherein modifying data in the display 1 2 buffer comprises: 3 performing a pattern recognition operation on the data generated by the 4 first application to create a layout; and 5 forming an overlay with the layout and with predetermined information 6 about a display corresponding to the user interface, the overlay used 7 to determine placement of the data generated by the second 8 application in the display. 1 The computer system of claim 34, wherein the layout comprises of grid 35. cells corresponding to display areas in the user interface, and wherein the 2 3 data generated by the second application is placed in the grid cells. The computer system of claim 33, wherein the first application runs in the 1 2 background while the user interacts with the second application. A method comprising: 2 reading raster data from a raster display buffer containing an image 3 generated by a first application; 4 performing a pattern recognition on the image to generate a pattern; 5 applying predetermined information about the image with the pattern to

Ricoh \ 29 074451.P115

determine a layout of the image;

- generating an overlay using the layout of the image; and
 placing data generated by a second application on the overlay.
- 1 38. The method of claim 37, further comprising writing the overlay into the raster display buffer.
- The method of claim 37, wherein the image comprises a user interface from the first application, and wherein a user interacts with the second application through the user interface while the first application runs in the background.
- 1 40. The method of claim 39, wherein while the user interacts with the second 2 application, the first application has no control of input received from the 3 user.